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## **Goal, strategies and actions**

Seven goals animate the fourth staff draft strategic plan. Achieving these goals will accomplish the 12 integrated and linked recommendations of the Task Force in 2007.

The goals:

1. Restore the Delta ecosystem and create a reliable water supply for California.
2. Designate the Delta as a unique and valued place, an action critical to achieving our co-equal goal.
3. Make the Delta the core of a healthy estuary.
4. Promote water conservation, efficiency, and sustainable use.
5. Expand options for water conveyance, storage and improved reservoir operations and ensure they both restore the Delta ecosystem as well as reliably move water around the state.
6. Reduce risks to people, property and state interests in the Delta.
7. Create a new governance structure with the authority, responsibility and secure funding to achieve these goals.

### Strategic choice precedes actions

Executive Order S-17-06 calls for Delta Vision to develop:

- “A Strategic Plan to implement findings and recommendations for public policy changes, public and private investment strategies, Delta-Suisun preparedness and emergency response plans for near-term catastrophic events, levee maintenance options, and how to monitor and report performance.”
- ”Recommendations on institutional changes and funding mechanisms necessary for sustainable management of the Delta. Recommendations may include a discussion of oversight, land use and implementation authorities.”

This document outlines the goals, strategies and actions that we recommend to fulfill this mandate. Within each goal are a set of strategies, and within each strategy a set of actions. The actions form our specific recommendations to the Legislature, Governor, and the state of California, but can only be understood within the context of the strategies.

1 For example, our vision and this strategic plan recommend increased efficiency and  
2 conservation in use of water resources (goal #4). The major strategies we recommend  
3 to achieve this goal are reducing per-capita water demand and increasing regional self-  
4 sufficiency. The recommended actions are more specific. For example, we recommend  
5 increasing regional self sufficiency by setting a specific statewide target for water  
6 recycling, requiring the State Water Resources Control Board to set goals for infiltration  
7 and direct use of urban storm water, and several other actions.

8  
9 Goals are achieved by discrete actions - by making an authoritative decision, by  
10 mobilizing public and private resources to achieve a purpose, by regulation of  
11 behaviors, by public education or by providing incentives to achieve desired behaviors,  
12 for example. But strategies provide the rationale and organizing framework for the  
13 selection of those actions. Selection of actions should not rely on arbitrary justifications,  
14 such as superficial similarity to a program run by a familiar agency or another state.  
15 Strategies also provide a framework within which actions can be changed over time.  
16 Because this is a strategic plan for the State of California, actions of state agencies are  
17 the primary focus.  
18

19 **Goal 1: Restore the Delta ecosystem and create a reliable water**  
20 **supply for California.**

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22  
23 **Strategy 1.1: Make the co-equal goal the foundation of Delta and water policy**  
24 **making.**

25  
26 Actions recommended:

27  
28 1.1.1. Write the co-equal goal into statute, and incorporate the co-equal goal into the  
29 mandated duties and responsibilities of all state agencies with significant  
30 involvement in the Delta.

31 1.1.2. Require the achievement or advancement of the co-equal goal in all water,  
32 environmental and other bonds that directly or indirectly fund activities in the  
33 Delta.

34 1.1.3. Write the co-equal goals into the California constitution.  
35

36 **Goal 2: Designate the Delta as a unique and valued place, an action**  
37 **critical to achieving our co-equal goal.**

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39 **Strategy 2.1. Utilize State and Federal special designation areas to reinforce the**  
40 **value and uniqueness of the Delta.**

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Actions recommended:

- 2.1.1. Apply for the designation of the Delta as a federally recognized National Heritage Area (NHA) by 2010,
- 2.1.2. Create a multi-unit State Recreation Area in the Delta, potentially combining existing and newly designated areas, by 2010.
- 2.1.3. Create market structures or incentives for a sustainable Delta agriculture that produces public benefits by 2010.
- 2.1.4. Create special enterprise zones at the major “gateways” to the Delta.

**Goal 3: Make the Delta the core of a healthy estuary.**

**Strategy 3.1: Restore extensive interconnected habitats, especially critical land-water interfaces, within the Delta and Delta watershed. The target should be 100,000 acres managed for ecosystem purposes by 2100.**

Actions recommended:

- 3.1.1. Increase frequency of floodplain inundation and establish new floodplains, focusing on the Sacramento River/Yolo Bypass, Mokelumne River, San Joaquin River and upstream floodplains.
- 3.1.2. Restore intertidal marsh, including 15,000 acres in the Delta and an additional 12,500 acres in Suisun Marsh, by 2020. Equivalent additional amounts would be restored by 2040 and more lands thereafter as required to achieve ecosystem functions.
- 3.1.3. Restore tidal open water areas, with a target of 20,000 acres total by 2020 and an additional 15,000 acres by 2040.
- 3.1.4. Restore grasslands and seasonal wetland complexes adjacent to tidal marsh restoration areas.

**Strategy 3.2. Establish migratory corridors for fish, birds and other animals along selected Delta river channels.**

Actions recommended:

1  
2 3.2.1. Implement high priority improvements to physical habitats along selected river  
3 corridors by 2015.

4  
5 3.2.2. Implement medium-priority corridor improvements by 2020 concurrent with  
6 conveyance changes.

7  
8 3.2.3. Implement high-priority flow improvements by 2012.

9  
10 3.2.4. Resolve high-priority conveyance-driven flow conflicts by 2012.

11  
12 3.2.5. Utilize the Central Valley Flood Protection Plan, beginning immediately, to  
13 identify areas of the lower San Joaquin River, including through the Delta, where  
14 flood conveyance capacity can be expanded in a continuous reach (see Strategy  
15 5.2).

16  
17 3.2.6. Utilize the National Heritage Area planning effort (see Strategy 2.1), beginning  
18 immediately, to identify mechanisms to encourage recreational investments along the  
19 key river corridors subject to the improvements described above, and plan their  
20 implementation.

21  
22  
23 **Strategy 3.3. Promote viable, diverse populations of native species by reducing**  
24 **risks of entrainment and predation.**

25  
26 Actions recommended:

27  
28 3.3.1. Implement measures to control harmful invasive species at existing locations,  
29 and minimize or preclude their colonization of new restoration areas to non-significant  
30 levels, by 2012.

31  
32 3.3.2. Reduce entrainment and export effects on fish by instituting diversion  
33 management measures by 2009, implementing near-term conveyance improvements  
34 by 2015 (see Strategy 5.1), and relocating diversions (see Strategies 3.4 and 3.5).

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37 **Strategy 3.4. Restore Delta flows and channels to support a healthy Delta**  
38 **estuary.**

39  
40 Actions recommended:

41  
42 3.4.1. Require the State Water Resources Control Board (SWRCB) to adopt new  
43 requirements by 2012 to increase spring outflow (in all but the wettest years) with  
44 implementation to commence no later than 2015.

1 3.4.2. Require the SWRCB to adopt new requirements by 2012 to reintroduce fall  
2 outflow variability with implementation to commence no later than 2015.

3  
4 3.4.3. Require the SWRCB to revise its Vernalis flow objectives and export criteria to  
5 provide for net positive flows on the San Joaquin River.

6  
7 3.4.4. Provide short-duration fall San Joaquin River pulse flows, with implementation  
8 by 2015.

9  
10 3.4.5. Reconfigure Delta waterway geometry to increase variability in estuarine  
11 circulation patterns, by 2015.

12  
13 **Strategy 3.5. Achieve sufficient water quality improvements to meet drinking**  
14 **water, agriculture, and ecosystem long-term goals.**

15  
16 Actions recommended:

17  
18 3.5.1. Require the Central Valley Regional Water Quality Control Board (CVRWQCB)  
19 to immediately re-evaluate wastewater treatment plant discharges into Delta  
20 waterways and upstream rivers and set discharge requirements at levels that are fully  
21 protective of human health and meet ecosystem needs.

22  
23 3.5.2. Require the CVRWQCB to adopt a long-term program to regulate discharges  
24 from irrigated agricultural lands by 2010.

25  
26 3.5.3. Require the CVRWQCB to review the impacts of urban runoff on Delta water  
27 quality and adopt a plan to reduce or eliminate those impacts by 2012.

28  
29 3.5.4. Relocate as many of the Delta drinking water intakes as feasible to channels  
30 where water quality is higher and that are away from sensitive habitats. The North  
31 Bay Aqueduct and the Contra Costa Water District intakes should be relocated in the  
32 near term, with state and federal south Delta intakes relocated upon completion of  
33 the current environmental planning processes.

34  
35 3.5.5. Develop and implement Total Maximum Daily Load (TMDL) programs by 2012  
36 for areas upstream of the Delta to reduce the loads of organic and inorganic mercury  
37 entering the Delta from tributary watersheds.

38  
39 3.5.6. Comprehensively monitor fish and wildlife health at suspected toxic sites,  
40 beginning in 2009.

41  
42 **Goal 4: Promote water conservation, efficiency, and sustainable use.**  
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1       **Strategy 4.1. Reduce urban, residential, industrial and agricultural water**  
2       **demand through improved water use efficiency and other means.**

3  
4       Actions recommended:

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6       4.1.1. Enact legislation and require urban retail water purveyors to implement  
7       measures to achieve a 20% reduction in urban per capita water use throughout  
8       California by December 31, 2020 and target a 40% reduction, especially in non-  
9       coastal areas, by 2050.

10      4.1.2. Enact legislation to require urban and agricultural water purveyors to adopt  
11      more aggressive tiered pricing and related mechanisms.

12      4.1.3. Broaden the scope and requirements embodied in California Water Code  
13      §10910 et. seq. (commonly referred to as SB 610 Water Supply Assessments) and  
14      related provisions under the California Environmental Quality Act (CEQA).

15      4.1.4. Require all retail water purveyors to develop an integrated plan for response to  
16      Delta water supply curtailments.

17      4.1.5. Require DWR to provide funding for new incentive-based programs to promote  
18      the widespread and mainstream adoption of aggressive water conservation.

19      4.1.6. Require the SWRCB to certify equipment and methods which significantly  
20      reduce or eliminate any return flows to surface water and groundwater systems as  
21      best management practices available to comply with the Irrigated Lands Regulatory  
22      Program.

23      4.1.7. Require preparation and submittal of Agricultural Water Management Plans  
24      (similar to the Act requiring UWMPs) to DWR every five years.

25      4.1.8. Restrict access to state grants and loans as well as approvals from DWR or the  
26      SWRCB for water transfer activities to entities that have not completed urban and  
27      agricultural water management plans per DWR criteria.

28      4.1.9. Require DWR to continue support for the California Urban Water Conservation  
29      Council and the AWMC.

30      4.1.10. Require DWR and the SWRCB to significantly increase efforts to create and  
31      promote public educational messaging throughout the state on water conservation.

32  
33       **Strategy 4.2. Increase regional self-sufficiency through diversifying water**  
34       **supply portfolios while not impacting flows into the Delta**

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36       Actions recommended:  
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- 1 4.2.1. Modify the Water Recycling Act of 1991 to add a statewide target to recycle a  
2 total of 1.5 million acre-feet of water annually by 2020.
- 3 4.2.2. Enact legislation to encourage local water agencies to at least triple the current  
4 statewide plant capacity for generating new water supplies through ocean and  
5 brackish water desalination by 2020.
- 6 4.2.3. Require the SWRCB to set goals for infiltration and direct use of urban storm  
7 water runoff throughout the Delta watershed and export areas by 2015.
- 8 4.2.4. Require DWR to develop a model stormwater management ordinance for  
9 urban areas throughout the Delta watershed.
- 10 4.2.5. Require the SWRCB to ensure accurate and timely information is collected and  
11 reported on all surface water diversions in California by 2012.
- 12 4.2.6. Require DWR, local water districts and counties to ensure accurate and timely  
13 information is collected on all groundwater diversions in areas upstream, within and  
14 that receive exports from the Delta watershed and that such data is reported to the  
15 SWRCB.
- 16 4.2.7. Restrict access to state grants and loans as well as approvals from DWR or the  
17 SWRCB for water transfer activities.
- 18 4.2.8. Enact legislation encouraging groundwater banking, extraction and delivery  
19 facilities for State and local surface water supplies.
- 20 4.2.9. Require water resource plans and land use plans to protect areas needed for  
21 groundwater recharge and to enact standards for low-water use landscaping.
- 22 4.2.10. Require DWR and SWRCB to further improve water transfer procedures.
- 23 4.2.11. Permit DWR, the SWRCB, and DFG to establish and fund the initial  
24 development and testing of new market mechanisms to provide water users and  
25 ecosystem managers with additional tools to adaptively manage instream flows and  
26 diversions.

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29 **Goal 5: Expand options for water conveyance, storage and improved**  
30 **reservoir operations and ensure they both restore the Delta**  
31 **ecosystem as well as reliably move water around the state.**

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34 **Strategy 5.1. Expand conveyance, storage and reservoir operation options to**  
35 **meet long-term demands in light of likely future changes in the Delta.**

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Actions recommended:

5.1.1. Direct the Department of Water Resources, in cooperation with the Department of Fish and Game, to build upon the studies underway as part of the Bay Delta Conservation Plan (BDCP) and immediately begin a 1-year investigation to improve our knowledge of storage and conveyance requirements to obtain desired flexibility, as well as to document the changes in annual surface diversion quantities that could result from shifting diversion timing to wetter periods (both within and between years) to achieve desired ecosystem flow objectives.

5.1.2. Using a defined set of economic, ecologic and water supply attributes as primary indicators, make a decision regarding the size and location of new storage and conveyance facilities, and direct creation of a long-term action plan to guide their design and construction, by the end of 2010.

5.1.3. Obtain permits and ground-test the components of a “two-barrier” Middle River Conveyance option, if no fatal flaws are identified in preliminary evaluations and initially as a reversible experiment, by October 2009.

5.1.4. Complete construction of 50% of the identified new surface and groundwater storage and conveyance facilities to accommodate shifted diversion timing and climate change, by 2020. and the remaining 50% of needed facilities by 2030.

**Strategy 5.2. Integrate Central Valley flood management with water supply planning**

Actions recommended:

5.2.1. Modernize flood control operation diagrams for all major California reservoirs for which the U.S. Army Corps of Engineers has prescribed flood control regulations by 2012.

5.2.2. Create a flood bypass along the lower San Joaquin River in coordination with the Central Valley Flood Protection Plan.

5.2.3. Require DWR to incentivize additional infiltration and storage of runoff and floodwater upstream of the Delta, beginning immediately.

5.2.4. Require DWR to study, and if feasible implement by 2012, a plan to convey water from storage reservoirs to groundwater infiltration sites.

5.2.5. Over time, work with the U.S. Forest Service to revise the Forest Plans for the National Forests in the Sierra Nevada to encourage greater infiltration.

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**Goal 6. Reduce risks to people, property and state interests in the Delta.**

**Strategy 6.1. Match the level of protection provided by Delta levees and the uses of land and water enabled by those levees.**

**Recommended Actions:**

6.1.1. Immediately adopt the Delta Levee Classifications Table by Executive Order and legislative enactment.

6.1.2. Require conformity with the Delta Levee Classifications Table in all Delta investments, including infrastructure and land use.

6.1.3. As part of the CDEW Plan (see Strategy 7.2), require the Delta Protection Commission, the Bay Conservation and Development Commission, the SWRCB, DFG and DWR and local governments to participate in setting levee configurations and priorities.

6.1.4. Require DWR to adopt a levee policy that will address seismic risk, climate change, subsidence and sea level rise; and that is consistent with the Delta Levee Classifications Table, by 2010.

6.1.5. Continue the levee subventions program pending long-term policies and funding following the CDEW and related planning efforts.

6.1.6. Determine the target levels of protection that are necessary to achieve Delta Vision goals, by 2010. Set priorities for upgrading levees in the CDEW Plan, considering the role of levees in achieving water quality and flow objectives, and ecosystem needs.

6.1.7. Vest authority for levee priorities and funding with the CDEW Council to ensure a rational and cost effective relationship between levee investments and land use, ecosystem, water flow and quality, conveyance, and Delta-as-place values.

**Strategy 6.2. Ensure appropriate land uses in the Delta region**

**Actions recommended:**

6.21. Strengthen land use oversight for the Cosumnes/Mokelumne floodway, and the San Joaquin/South Delta lowlands, beginning immediately.

1 6.2.2. Strengthen land use oversight for Bethel Island and the City of Isleton and its  
2 vicinity on Brannan-Andrus Island, beginning immediately.

3 6.2.3. Require the DPC and local governments to prepare local plans for five at-risk  
4 locations within the primary zone: Walnut Grove (including the portion on Grand  
5 Island), Locke, Clarksburg, Courtland, and Terminous.

6 6.2.4. Require the Department of Water Resources (DWR) to form a landowner  
7 consortium with the Ironhouse Sanitary District to strategize a land use transition to  
8 recreation, terrestrial habitat, subsidence reversal, carbon sequestration, dredged  
9 material handling, and appropriate agriculture on Sherman, Twitchell, and Jersey  
10 Islands.

11 6.2.5. Require the CDEW Council, the DPC, and the Sacramento Area Council of  
12 Governments to develop a model land-use protection ordinance for protecting sea  
13 level rise buffer lands by 2010.

14 6.2.6. Require the Delta Conservancy and related entities to acquire easements,  
15 purchase options, management agreements, and/or fee title in areas adjacent to the  
16 highest priority ecosystem restoration areas by 2020.

17 6.2.7. Require the Delta Conservancy and related entities to acquire easements,  
18 purchase options, management agreements, and/or fee title in areas adjacent to all  
19 remaining ecosystem restoration areas by 2040.

20

21 **Strategy 6.3. Achieve levels of emergency protection consistent with federal**  
22 **and state policies**

23 Actions recommended:

24 6.3.1. Complete a collaboratively prepared Delta-wide regional response plan by  
25 2010 which establishes mechanisms for regional coordination of life safety,  
26 evacuation, animal control, and levee flood fighting functions where needed.

27 6.3.2. Embark upon a comprehensive series of emergency management and  
28 preparation actions, beginning immediately.

29 6.3.3. Complete a comprehensive analysis of the costs and benefits of highway  
30 protection strategies, and adopt a policy based on its findings, by 2012.

31 6.3.4. Complete a comprehensive analysis of the costs and benefits of infrastructure  
32 protection strategies, and adopt a policy based on its findings, by 2012.

33

1 **Goal 7. Create a new governance structure with the authority,**  
2 **responsibility and secure funding to achieve these goals.**

3 **Strategy 7.1: Create the California Ecosystem and Water Council (replacing the**  
4 **California Bay-Delta Authority), and create a new Delta Conservancy to**  
5 **implement ecosystem restoration projects and enhance the role of the CDEW**  
6 **Council.**

7 Actions recommended:

8 7.1.1. Create a California Delta Ecosystem and Water (CDEW) Council to replace the  
9 CALFED Bay-Delta Authority and subsume CALFED programs.

10 7.1.2. Create a California Delta Conservancy to implement ecosystem enhancement  
11 and acquire and/or manage lands as necessary to implement the CDEW Plan.

12 7.1.3. Strengthen the Delta Protection Commission (DPC) to increase oversight of  
13 Delta land use, and protect the Delta's values as a place.

14 7.1.4. Create a Delta Science and Engineering Program and a Delta Science and  
15 Engineering Board to design and support adaptive management policy making.

16

17 **Strategy 7.2: Create a California Delta Ecosystem and Water Plan to ensure**  
18 **flexibility and consistency of action among state, federal and local entities.**

19 Actions recommended:

20 7.2.1. Develop a binding CDEW Plan that achieve the goals of Delta Vision, satisfies  
21 the requirements of the Coastal Zone Management Act (CZMA), and builds upon and  
22 integrates other Delta-related plans, by December 2010.

23 7.2.2. Institutionalize adaptive management by incorporating five year review and  
24 revision cycles in the CDEW Plan.

25 7.2.3. Achieve governance consistency among various agencies by assigning control  
26 of funding, specific reporting requirements and specific grants of authority to the  
27 Council in the CDEW Plan.

28 7.2.4. Provide remedies for actions inconsistent with the CDEW Plan by federal,  
29 state, or local agencies, including both alternative dispute resolution processes and  
30 legal remedies.

31

1     **Strategy 7.3. Finance the activities called for in the California Delta Ecosystem**  
2     **and Water (CDEW) Plan from multiple sources.**

3     Actions recommended:

4     7.3.1. Provide a flexible, effective and reliable financing structure to pay capital and  
5     operating costs that provides the CDEW Council the authority to issue revenue-based  
6     debt, to charge fees, to allocate funds, and to require the Council to place obligations  
7     upon recipients of benefits from those expenditures.

8     7.3.2. Charge a per-acre-foot fee on water diversions within the Delta watershed, and  
9     a separate fee on water conveyed through or around the Delta, to finance the  
10    management of the co-equal values.

11    7.3.3. Make access to state funding for any CDEW Plan-related purpose contingent  
12    upon a contractor's full compliance with all California resource laws and policies,  
13    including diversion rights, water quality and ecosystem regulations, and the CDEW  
14    Plan.

15    7.3.4. Prevent funds allocated by the CDEW Council to local districts from being  
16    diverted to other purposes by making State Water Project deliveries contingent upon  
17    proper expenditure of funds.

18    7.3.5. Incorporate language requiring integrated action consistent with an adopted  
19    CDEW Plan in any Delta-related bond, contract, or any other financing instrument.

20    7.3.6. Require local interests to develop a finance plan to pay for the local share of  
21    any specific major capital project as a precondition to design and construction. Local  
22    cost shares should be related to benefits received and cost of services provided.

23    7.4.7. Develop new revenue sources to finance CDEW Plan activities, potentially  
24    including conservation banking, carbon offsets, or other sources.

25    7.4.8. Require beneficiaries (public and private) of CDEW Council financing to  
26    support and conform to the work of the Council and the CDEW Plan.

27